



Search Report

EIC 2800

STIC Database Tracking Number

To: LINDA SMITH
Location: JEF-9A28
Art Unit: 2862
Monday, January 12, 2009

Case Serial Number: 10/581784

From: RAJ PATEL
Location: EIC2800
JEF-4A58
Phone: (571)272-6231

raj.patel@uspto.gov

Search Notes

RE: Method of Manufacturing a Lens Driving Device having a lens barrel holder and a spacer or stopper that is removed or pulled out once the parts are fixed.

Attached are the search histories and the edited search results from the following databases:

- DIALOG – Cluster of various Engineering Databases
- STN – HCAPLUS, WPIX, JAPIO, KOREAPAT
- EAST – DERWENT, EPO, JPO, USPAT & USPGPUB

The enclosed documents include references that show lens driving devices that may include a lens barrel holder with a spacer or stopper.

Please take a look at the first few references; however I suggest that you browse through all of the enclosed references.

Please feel free to let me know if you want us to perform more searching or have any additional questions or concerns.

Best Regards,
Raj.

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	"20070116445"	US-PGPUB ; USPAT; DERWENT	OR	OFF	2009/01/08 09:48
S2	1	2005-405576.NRAN.	DERWENT	OR	OFF	2009/01/08 09:56
S3	0	(mazahiro near2 kozakai) and (hidekazu near2 yoneyama)	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:51
S4	2	(masahiro near2 kozakai) and (hidekazu near2 yoneyama)	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:52
S5	920	nidec adj sankyo	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:52
S6	920	(nidec adj sankyo).as.	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:52
S7	113	(nidec adj sankyo).as. and (driv\$4 near5 lens)	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:53
S8	67	(nidec adj sankyo).as. and (driv\$4 near5 lens) and magnet\$2	US-PGPUB ; USPAT; USOCR; FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	OFF	2009/01/08 10:55

CASE # 10/581,784

EAST Search History

S9	85286	(lens or glass\$3 or optic\$4) near3 (driv\$4 or actuat\$4 or activat\$4 or stimulat\$4 or energiz\$4 or bias\$4 or induc\$4)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/09 15:28
S10	123610	(magnet\$3 or electromagnet\$4) near3 (multiple or plural or multi or two or first or second or various or separate or differ\$4 or number)	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/09 15:29
S11	74456	(stopper\$2 or spacer\$2 or abutting or regulat\$4 or connector\$2) near5 (remov\$4 or pull\$4 or detach\$4 or discard\$4 or eliminat\$4 or dislodg\$4 or displac\$4 or separate\$3 or (take near2 (out or away or off)))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/09 15:30
S12	2	S9 and S10 and S11	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/09 15:31
S13	195642	(lens or glass\$3 or optic\$4) near3 (driv\$4 or actuat\$4 or activat\$4 or stimulat\$4 or energiz\$4 or bias\$4 or induc\$4)	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:34
S14	208184	(magnet\$3 or electromagnet\$4) near3 (multiple or plural or multi or two or first or second or various or separate or differ\$4 or number)	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:35
S15	206261	(stopper\$2 or spacer\$2 or abutting or regulat\$4 or connector\$2) near5 (remov\$4 or pull\$4 or detach\$4 or discard\$4 or eliminat\$4 or dislodg\$4 or displac\$4 or separate\$3 or (take near2 (out or away or off)))	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:35
S16	697	S13 and S14 and S15	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:35
S17	0	S13 with S14 with S15	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:36
S18	677	S16 and (Manufactur\$4 or mak\$4 or produc\$4)	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:36
S19	2	S18 and (lens near2 barrel near2 holder)	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:37
S20	3	S13 same S14 same S15	US-PGPUB ; USPAT	OR	ON	2009/01/09 15:39

EAST Search History

S21	6	("5134334" ! "5225941" ! "5317351" ! "5589723" ! "5726521" ! "6392827"). PN. OR ("7424215").URPN.	US-PGPUB ; USPAT; USOCR	OR	OFF	2009/01/09 15:40
S22	11	S13 with S14 and (lens near2 barrel near3 holder\$2)	US-PGPUB ; USPAT	OR	ON	2009/01/09 16:01
S23	57	(S13 with S14) and S15	US-PGPUB ; USPAT	OR	ON	2009/01/09 16:37
S24	0	(lens near2 driv\$4) with (lens near3 mov\$5) with (lens near2 barrel) with magnet\$4 with (spacer\$2 near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/12 11:02
S25	0	(lens near2 driv\$4) and (lens near3 mov\$5) and (lens near2 barrel) and magnet\$4 and (spacer\$2 near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/12 11:03
S26	5	(lens near2 driv\$4) and (lens near3 mov\$5) and (lens near2 barrel) and magnet\$4 and (spacer\$2 near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	US-PGPUB ; USPAT	OR	ON	2009/01/12 11:03
S27	10	(lens near2 driv\$4) and (lens near3 mov\$5) and (lens near2 barrel) and magnet\$4 and ((spacer\$2 or stopper\$2) near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	US-PGPUB ; USPAT	OR	ON	2009/01/12 11:06
S28	5	S27 not S26	US-PGPUB ; USPAT	OR	ON	2009/01/12 11:06
S29	0	(lens near2 driv\$4) and (lens near3 mov\$5) and (lens near2 barrel) and magnet\$4 and ((spacer\$2 or stopper\$2) near3 (remov\$4 or detach\$4 or ((take or pull\$4) near2 (away or out or off))))	FPRS; EPO; JPO; DERWENT; IBM_TDB	OR	ON	2009/01/12 11:10
S30	1	"20040207745"	US-PGPUB	OR	ON	2009/01/12 12:59
S31	2	"20040207745"	US-PGPUB ; DERWENT	OR	ON	2009/01/12 12:59

[File 2] INSPEC 1898-2009/Nov W5

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[File 23] CSA Technology Research Database 1963-2008/Nov

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[File 6] NTIS 1964-2009/Jan W3

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[File 8] EI Compendex(R) 1884-2008/Dec W3

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[File 14] Mechanical and Transport Engineer Abstract 1966-2009/Dec

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[File 25] Weldasearch 1966-2008/Nov

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[File 31] World Surface Coatings Abs 1976-2008/Nov

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[File 32] METADEX 1966-2008/Nov

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[File 34] SciSearch(R) Cited Ref Sci 1990-2009/Jan W1

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[File 35] Dissertation Abs Online 1861-2008/Nov

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[File 36] MetalBase 1965-20090108

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[File 46] Corrosion Abstracts 1966-2009/Jan

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[File 56] Computer and Information Systems Abstracts 1966-2009/Jan

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[File 61] Civil Engineering Abstracts. 1966-2009/Dec

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[File 63] Transport Res(TRIS) 1970-2009/Dec

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[File 65] Inside Conferences 1993-2009/Jan 08

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[File 68] Solid State & Superconductivity Abstracts 1966-2009/Jan
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[File 81] MIRA - Motor Industry Research 2001-2008/May
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[File 95] TEME-Technology & Management 1989-2008/Dec W1
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[File 96] FLUIDEX 1972-2008/Oct
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[File 134] Earthquake Engineering Abstracts 1966-2009/Jan
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[File 239] Mathsci 1940-2008/Jan
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[File 240] PAPERCHEM 1967-2009/Jan W1
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[File 293] Engineered Materials Abstracts 1966-2008/Nov
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[File 315] ChemEng & Biotec Abs 1970-2008/Dec
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**File 315: December 2007 - the reloaded database is now online. Please consult the updated Bluesheet for details on new and changed fields.*

[File 323] RAPRA Rubber & Plastics 1972-2009/Dec
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**File 323: Alert feature enhanced for multiple files, duplicate removal, customized scheduling. See HELP ALERT.*

[File 335] Ceramic Abstracts/World Ceramics Abstracts 1966-2009/Jan
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[File 434] SciSearch(R) Cited Ref Sci 1974-1989/Dec
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d s
Set Items Description
S1 23987 S (LENS OR OPTIC?????) (2N) (DRIV????)

S2 0 S LENS() BARREL() HOLDER? ?

S3 336 S LENS(2N) BARREL(2N) HOLD???

S4 4293 S (STOPPER??? OR SPACER??? OR ABUTTING() MEMBER? ? OR REGULATING() MEMBER? ?) (3N) (REMOV???? OR DETACH???? OR ((PULL??? OR TAKE???) (2N) (OUT OR AWAY OR OFF)) OR DISCARD???? OR DISLODG????)

S5 3694 S S1 AND (MAGNET??? OR ELECTROMAGNET????)

S6 0 S S5 AND S3

S7 49 S S1 AND S3

S8 0 S S7 AND S4

S9 0 S S1 AND S4

S10 0 S S3 AND S4

S11 0 S S7 AND (STOPPER??? OR SPACER??? OR ABUTTING() MEMBER? ? OR REGULATING() MEMBER? ?)

S12 0 S S7 AND (STOPPER??? OR SPACER??? OR (ABUT???? OR REGULAT????) (2N) (MEMBER? ? OR PIECE? ? OR UNIT? ? OR ELEMENT? ?))

S13 63 S S1 AND (STOPPER??? OR SPACER??? OR (ABUT???? OR REGULAT????) (2N) (MEMBER? ? OR PIECE? ? OR UNIT? ? OR ELEMENT? ?))

S14 0 S S13 AND S3

S15 11 RD S7 (unique items)

S16 11 S S15 NOT PY>2004

S17 21 RD S13 (unique items)

S18 21 S S17 NOT S16

S19 15 S S18 NOT PY>2004

S20 0 S S5 AND S4

STN 01/12/2009

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FILE 'HCAPLUS, WPIX, JAPIO, KOREAPAT' ENTERED AT 13:43:52 ON 12 JAN 2009
L1 63588 SEA (LENS OR OPTIC#####) (2N) DRIVE####
L2 15545 SEA (STOPPER### OR SPACER### OR ABUTTING(W) MEMBER## OR
REGULATING(W) MEMBER##) (3N) (REMOV### OR DETACH### OR
((FULL### OR TAKEOFF#) (2N) (OUT OR AWAY OR OFF)) OR DISCARD### OR
OR DISLODGE###)
L3 233 SEA LENS(W) BARREL(2N) HOLDER##
L4 181412 SEA (MAGNET### OR ELECTROMAGNET#####) (3N) (MULTIPLE OR PLURAL
OR MULTI OR TWO OR FIRST OR SECOND OR VARIOUS OR DIFFER### OR
NUMBER)
L5 14297076 SEA (MANUFACTUR### OR MAK### OR PRODUC###)
L6 0 SEA L1 AND L2 AND L3 AND L4 AND L5
L7 30 SEA L1 AND L3
L8 0 SEA L7 AND L2
L9 1 SEA L7 AND (STOPPER### OR SPACER### OR ABUT### (2N) MEMBER##
OR REGULAT### (2N) MEMBER##)
L10 0 SEA L9 NOT 2005-2009/PY,PRY
L11 7 SEA L7 AND L5
L12 1 SEA L11 NOT 2005-2009/PY,PRY
D BIB KWIC
L13 9 SEA L7 AND (MAGNET### OR ELECTROMAGNET#####)
L14 5 SEA L13 NOT L11
L15 0 SEA L14 NOT 2005-2009/PY,PRY
L16 13 SEA L1 AND L2
L17 13 SEA L16 NOT (L9 OR L11)
L18 2 SEA L17 NOT 2005-2009/PY,PRY
D BIB KWIC 1-2
L19 4 SEA L7 AND L4
L20 2 SEA L19 NOT (L9 OR L11 OR L17)
L21 0 SEA L20 NOT 2005-2009/PY,PRY

C AS| STN